

Abstract

The present application describes color management architecture for a three-panel projection system that utilizes color selective polarization filters (CSPF) and polarizing beam splitting elements. An exemplary embodiment describes a color management architecture with a dichroic input beam splitter and three polarizing beam splitters. An output polarizing beam splitter is used as an analyzer. The color management system architecture can isolate any color channel from those remaining whose separation and combination are then carried out by a single beamsplitting element. The disclosed embodiments also provide an improvement in the ANSI contrast. In some embodiments, an achromatic quarter-wave plate is used in combination with a color filter to block the light reflected from projection optics.